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## **CLAIMS:**

method of effecting in-situ rejuvenation of an asphalt paved surface with an asphalt rejuvenating apparatus including a pick-up conveyor and a backhoe apparatus, wherein the asphalt paved surface includes an obstruction disposed therein, comprising the steps of:

- (a) hearing the asphalt paved surface to form heated asphalt;
- (b) scarifying the heated asphalt to form a scarified intermediate
- (c) milling the scarified intermediate to form a milled intermediate;
- (d) blending rejuvenating fluid with the milled intermediate to form a blended intermediate, wherein a portion of the blended intermediate is deposited proximate the obstruction; and
- (e) moving the blended intermediate from proximate the obstruction to an entrance of the pick-up conveyor with the backhoe apparatus.
- 20 2. The method as claimed in claim 1, wherein the blended intermediate is disposed behind the obstruction relative to the entrance to the pick-up conveyor.
  - 3. The method as claimed in claim 2, wherein, during step (d), the backhoe apparatus moves laterally relative to the asphalt paved surface connecting the blended intermediate to the entrance to the pick-up conveyor.
  - 4. The method as claimed in claim 3, wherein the backhoe apparatus is rotatably mounted to the asphalt rejuvenating apparatus for rotation about an axis perpendicular to the asphalt paved surface.

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- 5. The method as claimed in claim 4, wherein the backhoe apparatus is rotatably mounted to the pick-up conveyor.
- 6. The method as claimed in claim 5, wherein the backhoe apparatus is retractable.
- 7. The method as claimed in claim 6, wherein the backhoe apparatus is configured to move vertically relative to the asphalt paved surface.
  - 8. The method as claimed in claim 7, wherein the asphalt rejuvenating apparatus further comprises a heater a raking device, a main mill, and a pug mill, and wherein:

the heater heats the asphalt paved surface to form the heated asphalt;

the raking device dislodges the heated asphalt to form the scarified intermediate;

the main mill grinds the scarified intermediate to form the milled intermediate; and

the pug mill blends the rejuvenating fluid with the milled intermediate to form the blended intermediate.

- 20 9. The method as claimed in claim 2, wherein the blended intermediate is dragged to the entrance to the pick-up conveyor by the backhoe apparatus.
  - 10. The method as claimed in claim 9, wherein, during step (d), the backhoe apparatus moves laterally relative to the asphalt paved surface connecting the blended intermediate to the entrance to the pick-up conveyor.
    - 11. The method as claimed in claim 10, wherein the backhoe apparatus is rotatably mounted to the asphalt rejuvenating apparatus for rotation about an axis perpendicular to the asphalt paved surface.

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- 12. The method as claimed in claim 11, wherein the backhoe apparatus is rotatably mounted to the pick-up conveyor.
- 13. The method as claimed in claim 12, wherein the backhoe apparatus is retractable.
- The method as claimed in claim 13, wherein the backhoe apparatus is configured to move vertically relative to the asphalt paved surface.
  - 15. The method as claimed in claim 14, wherein the asphalt rejuvenating apparatus further comprises a heater, a vaking device, a main mill, and a pug mill, and wherein:
    - (a) the heater heats the asphalt paved surface to form the heated asphalt;
    - (b) the raking device dislodges the heated asphalt to form the scarified intermediate;
    - (c) the main mill grinds the scarified intermediate to form the milled intermediate; and
    - (d) the pug mill blends the requirementing fluid with the milled intermediate to form the blended intermediate.
    - 16. A method of effecting in-situ rejuvenation of an asphalt paved surface with an asphalt rejuvenating apparatus including a nick-up conveyor and a backhoe apparatus, wherein the asphalt paved surface includes an obstruction disposed therein, comprising the steps of:
      - (a) heating the asphalt paved surface to form heated asphalt;
      - (b) scarifying the heated asphalt to form a scarified intermediate;
      - (c) milling the heated asphalt to form a milled intermediate, wherein a portion of the milled intermediate is deposited proximate to the obstruction; and



(d) moving the milled intermediate from proximate the obstruction to an entrance to the pick-up conveyor with the backhoe apparatus.

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A method of effecting in-situ rejuvenation of an asphalt paved surface with an asphalt rejuvenating apparatus including a pick-up conveyor and a backhoe apparatus, wherein the asphalt paved surface includes an obstruction disposed therein, comprising the steps of:

- (a) heating the asphalt paved surface to form heated asphalt;
- (b) scraping and pulling the heated asphalt proximate to the obstruction with the backhoe apparatus to form a first intermediate; and
- (c) moving the first intermediate from proximate the obstruction to an entrance to the pick-up conveyor with the backhoe apparatus.